FIG. 1

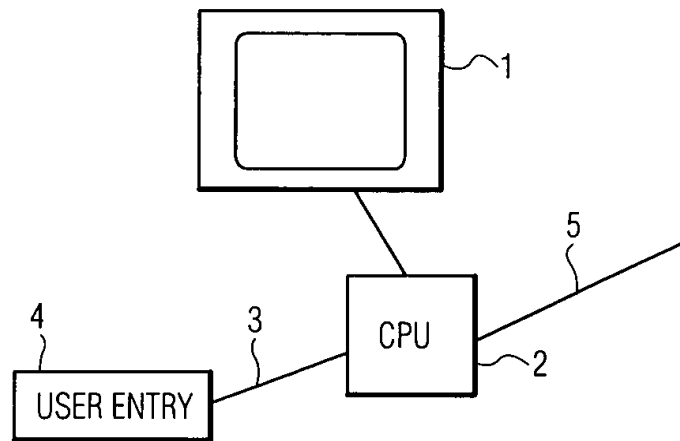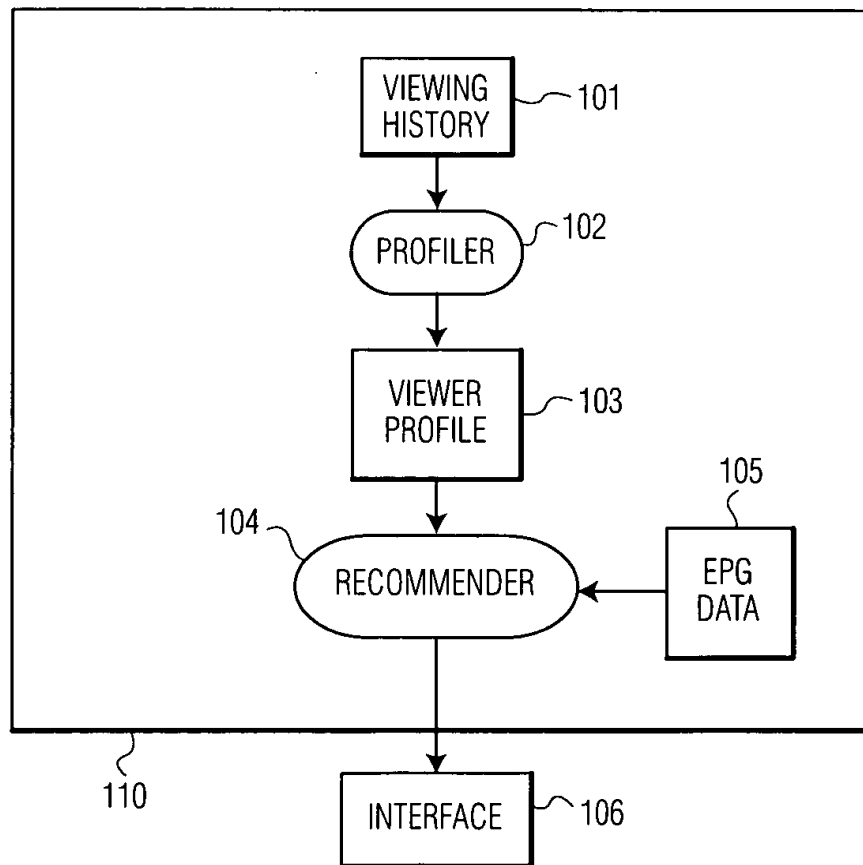**FIG. 2**

LET S BE ALL SHOWS NOT WATCHED IN THE 7 DAYS PRIOR TO
    AND INCLUDING THE CURRENT DAY.
LET N BE 1.

FOR EACH TV SHOW WATCHED
    ENTER THE WATCHED SHOW IN THE VIEWING HISTORY
    AS A POSITIVE EXAMPLE.
    SELECT A SUBSET S OF SHOWS NOT WATCHED
    SELECT AT RANDOM N SHOWS FROM SET S AND ENTER
    THEM IN THE VIEWING HISTORY AS NEGATIVE EXAMPLES.
    IF AN EXPLICIT VIEWER PROFILE IS AVAILABLE, THEN THE
    RANDOM SELECTION CAN BE BIASED AWAY FROM SHOWS
    "LIKED" AND TOWARDS SHOWS "NOT LIKED."

FIG. 3

FIELD	DESCRIPTION
$DATE	YYYYMMDD
$AIR_TIME	HHMM (E.G. SOME VALUE IN THE RANGE 0000-2359)
$STATION_SIGN	4 CHARACTERS (E.G. WABC)
$TITLE	120 CHARACTERS (E.G. "ANTIQUES ROADSHOW")
$DESC	120 CHARACTERS (E.G. "SKULLY VISITS ALIEN SPACECRAFT")
$GENRE	20 CHARACTERS (E.G."SCIENCE FICTION")
$ACTORS	120 CHARACTERS (E.G. "JOHN DOE, JANE DOE")
$DIRECTORS	120 CHARACTERS (E.G. "JOHN HITCHCOCK")
$HOSTS	120 CHARACTERS (E.G. "JOHN HOST")
$PRODUCERS	120 CHARACTERS (E.G. "JANE RICH, JOHN MONEYBAGS")
$WRITERS	120 CHARACTERS (E.G. "JOHN POET")

FIG. 4

TOTALIPROGRAMS	55	55	DESCILOCAL	4	0
DAYTIMEIMON2100	5	0	DESCINECESSARY	6	0
DAYTIMEIMON2200	6	1	DESCIPRIMETIME	5	0
DAYTIMEITUE2200	4	1	DESCIPROGRAMMING	4	0
DAYTIMEIWED2000	4	0	TV RATINGITV14	6	3
DAYTIMEIWED2200	6	0	TV RATINGITVG	0	4
STATIONIWABC	10	1	SEX RATINGIN	51	52
STATIONIWNBC	30	0	LANGUAGE RATINGIN	51	50
STATIONIWNYW	13	0	ADVISORYIADULT SITUATIONS	0	8
TITLEI20/20	5	0			
TITLEIDATELINE NBC	11	0	ADVISORYILANGUAGE	0	5
TITLEIMLB PLAYOFFS	10	0	MPAA RATINGIR	0	4
TITLEIPAID PROGRAMMING	0	5	STAR RATINGI**+	0	5
GENREIANIMATED	0	4	PROGRAM LANGUAGEIENGLISH	51	52
GENREIBASEBALL	13	1			
GENREICOMEDY	4	8	COUNTRY OF ORIGINIUNITED STATES	0	7
GENREIFOOTBALL	4	0			
GENREIMAGAZINE	18	0	EPISODE TITLEIGAME	7	0
GENREINEWS	22	4	EPISODE TITLEILEAGUE	4	0
GENREIREALITY	4	1	EPISODE TITLEINEW	5	0
GENREISITUATION	3	5	EPISODE TITLEISERIES	9	0
GENREISPORTS EVENT	15	2			
GENREITALK	18	3			
DESCIALLY	6	0			
DESCIIF	6	0			
DESCIMCBEAL	4	0			
DESCIALTERNATE	5	0			
DESCIGAME	4	0			
DESCILINEUP	5	0			

FIG. 5

$$T = k(C+) + k(C-)$$
$$P(C+) = k(C+)/T$$
$$P(C-) = k(C-)/T$$

FIG. 6A

$$P(fi|C+) = k(fi|C+)/k(C+)$$
$$P(fi|C-) = k(fi|C-)/k(C-)$$

FIG. 6B

$$P(C+|x) = P(x|C+)P(C+)/P(x)$$
$$P(C-|x) = P(x|C-)P(C-)/P(x)$$

WHERE

$$P(x) = P(x|C+)P(C+) + P(x|C-)P(C-)$$

$$P(x|C+) = \prod_{i=1}^{n} P(fi|C+)^{xi} \ (1-P(fi|C+))^{1-xi}$$

n = number of features in profile
fi = the ith feature in the profile is a bit string
       of length n, where the ith bit indicates the
$x = \{0,1\}^n$ presence (1) or absence (0) of
       feature fi in the program

FIG. 6C